Application No.: 10/629,443 2 Docket No.: 04597/000N029-US0

In the Claims

1. (Original) Improvements applied to continuous linear square-fitting machine used in the milling process of coconut endocarp (Cocos Nucifera L.), continuous linear square-fitting machine (1), particularly applied to the milling process of coconut endocarps, which were processed by a slicer machine (A), producing threads (F) which are led to the deposit (2) of the square-fitting machine (1) featured by being comprised by a metal structure (3) where a conveyor fixing system (SF) of threads al(f) is installed through fixing converyor chains (4) and a cutting system (SC) by circular saws (5); through the motor reducer set (6) and secondary transmission chains (7), the axes (8) rotate on bearings (9) making the fixing conveyor chains (4), mechanic or manually put into motion, to lead the threads (F) passing through the first saw (5a); the same are downwards compressed by a set of straps (10) and pulleys (12), making said threads to be exactly placed on the square, arrangement which is made possible due to the distribution of teeth (13), positioned in a spaced way and at 90° towards the chains (4).

- 2. (Original) Improvements applied to continuous linear square-fitting machine used in the milling process of coconut endocarp (Cocos Nucifera L.), in accordance with the claim 1 above and in a preferred construction, featured by the fact that the teeth (13) are assembled by pair of trapezoidal blades.
- 3. (Currently Amended) Improvements applied to continuous linear square-fitting machine used in the milling process of coconut endocarp (Cocos Nucifera L.), in accordance with elaims 1 and 2 above claim 1, featured by the fact that the teeth (13) are fixed in the external face of the linkds of the chains (4).
- 4. (Currently Amended) Improvements applied to continuous linear square-fitting machine used in the milling process of coconut endocarp (Cocos Nucifera L.), in accordance with the previous elaims claim 1, featured by the fact that the teeth (13) keep the threads (F) positioned at 90° towards the teeth of the saw of the cutting knifes (5) of the cutting system (SC).

5. (Currently Amended) Improvements applied to continuous linear square-fitting machine used in the milling process of coconut endocarp (Cocos Nucifera L.), in accordance with the previous claims claim 1, featured by the fact that the threads (F) enter the machinery through the conveyor chains (4a) with teeth (13) which will catch, at 90° position, the threads (F) coming from the deposit (2), passing through the first double saws (5a), going to another set of chain (4b) with teeth (13) which will catch, at 90° position, the lateral pieces of the threads (F) remained from the first cut, and leading them to the next set of saws (5b), and thus successively with the other conveyor chains (4c, 4d) and corresponding cutting saws (5c, 5d).

6. (Currently Amended) Improvements applied to continuous linear square-fitting machine used in the milling process of coconut endocarp (Cocos Nucifera L.), in accordance with the previous claims claim 1, featured by the fact that the coconut endocarp may be used for coating in the most variable ways of applications, being transformed into tables (P), obtained from the machine (1), which are produced on square and may be shaped into different ways such as rhombus, rectangular, square, trapezoidal, hexagonal, round, triangular, heptagonal, octagonal and irrgular; they further keep the original molecule structure of the endocarp and have an abrasive, mechanical and chemical resistance inherent to said original molecule structure. Side by side placed, they form plates which may be commercialized and applied to curve or irregular surfaces since their flexibility feature, besides they have various applications on objects like bottoms, handles, decoration in general, complementary clothing, etc.